

N^o 3043



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Complete Specification Left, 28th May, 1895—Accepted, 13th July, 1895

PROVISIONAL SPECIFICATION.

An Improved Waterproof Bed-protector with Peripheral Air Cushion.

CHARLES LEO BIRMINGHAM, Bachelor of Medicine, living at High Green, near Sheffield Yorkshire, England, do hereby declare the nature of this invention to be as follows :—

A piece or pieces of indiarubber sheeting or other waterproof material of convenient size and shape is so made that its outer border or edge will admit of being pneumatically inflated in such a manner that the inflated portion shall form a raised cushion or rim. This inflated portion is not to extend along the whole of the outer edge of the said piece of indiarubber sheeting or other waterproof material but a small portion of the said edge or rim is to be left uninflated in such a manner that this uninflated part taken together with the ends or cornua of the inflated rim or cushion shall form a channel through which shall flow or can be made to flow any liquid or fluid from other parts of the said india-rubber piece of sheeting or other waterproof material.

The object of this my invention is to preserve from being soiled stained soaked or wetted in any manner whatsoever, a part or the whole of any couch, bed or similar support or the coverings of, or bedding, mattresses, pillows or anything whatsoever which may form part of or in any way cover any such couch, bed or similar support by placing beneath the body of or some portion of the body of any patient or other person the aforesaid improved waterproof bed protector with peripheral air cushion, at such times and in such manner as may be necessary and useful.

And I declare that my invention consists in the partially surrounding the piece of india-rubber sheeting or other waterproof material with the inflated cushion or rim as above described.

Dated this 11th day of February 1895.

CHARLES LEO BIRMINGHAM,
Bachelor of Medicine,
Residing at High Green, near Sheffield, Yorkshire, England.

COMPLETE SPECIFICATION.

An Improved Waterproof Bed-protector with Peripheral Air Cushion.

I, CHARLES LEO BIRMINGHAM M.B. Bch., of High Green, near Sheffield, in the County of York, Medical Practitioner, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to waterproof bed protectors for use in obstetrical and gynecological operations, its object is to preserve from being soiled, stained, soaked or wetted in any manner whatsoever a part or the whole of any couch, bed or similar support, or the covering, bedding, mattresses or pillows, or anything which may form part of, or in any way cover any such couch, bed or similar support during obstetrical or gynecological operations, and also to so form arrange or

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Birmingham's Improved Waterproof Bed-protector with Peripheral Air Cushion.

construct said improved waterproof bed protector, that when not in use it may in a simple manner be reduced in size so as to become easily portable; to attain which I construct, arrange or form my improved waterproof bed protector substantially as set forth in the accompanying drawings which are to be taken as part of this Specification and read therewith. 5

Fig. 1 is a plan of one shape or form of my improved waterproof bed protector shown in working position upon a part of a bed. Fig. 2 is a cross sectional elevation of same when not in use.

Fig. 3 is a cross sectional elevation taken on line *a a* of said Fig. 1.

Fig. 4 is a similar cross sectional elevation of a modification of my invention, 10 and

Figs. 5, 6 and 7 are plans showing modified forms of my improved bed protector.

Similar letters refer to similar parts throughout the several views.

I preferably take two pieces of indiarubber or other suitable waterproof 15 material *A* cut to any of the shapes shown, and I cement or otherwise fasten them together or one upon the other in such a way that the outer board or edge *a*¹ will admit of being pneumatically inflated so as to form a partially peripheral raised air cushion or rim.

The said inflatable portion *a*¹ does not extend around the whole periphery or 20 margin of my improved bed protector *A*, as a small portion of the said margin or edge is arranged at *a*³ so as not to be capable of inflation, but is arranged in such a manner that the said uninflatable part *a*¹ taken together with the ends of cornua *a*³ of the inflatable part *a*¹ forms a channel *a*² through which may flow any liquid or fluid from other parts of the surface within the marginal inflated rim or 25 periphery *a*¹.

I would have it understood that I do not confine myself to any exact shape although I prefer for the majority of operations to use the shape shown at Fig. 1, and I prefer to make the bed protector sufficiently large in order that a patient may where practical sit upon the part within the inflated peripheral as shown at 30 Fig. 4.

Also I in some cases make the bed protector of one piece of material as shown at Fig. 4.

I fix a receiving tube *a*⁴ for the purpose of conducting air into the inflatable parts *a*¹ so that the rim or periphery may be blown up or inflated when it is 35 required to use the bed protector similar to the inflation of a pneumatic tyre or football, and when it is desired to remove the said bed protector it is only necessary to allow the air to escape through the conductor *a*⁴ by which means the protector obtains to the form of one flat sheet and consequently becomes very portable.

Having now particularly described and ascertained the nature of my said inven- 40 tion and in what manner the same is to be performed I declare that what I claim is

1. In a waterproof bed protector for use in obstetrical and gynecological operations the combination of two sheets of waterproof material so secured 45 together that a part of the periphery is pneumatically inflated, and the remainder is left flat so as to leave a passage for the flow of liquid substantially as described and illustrated.

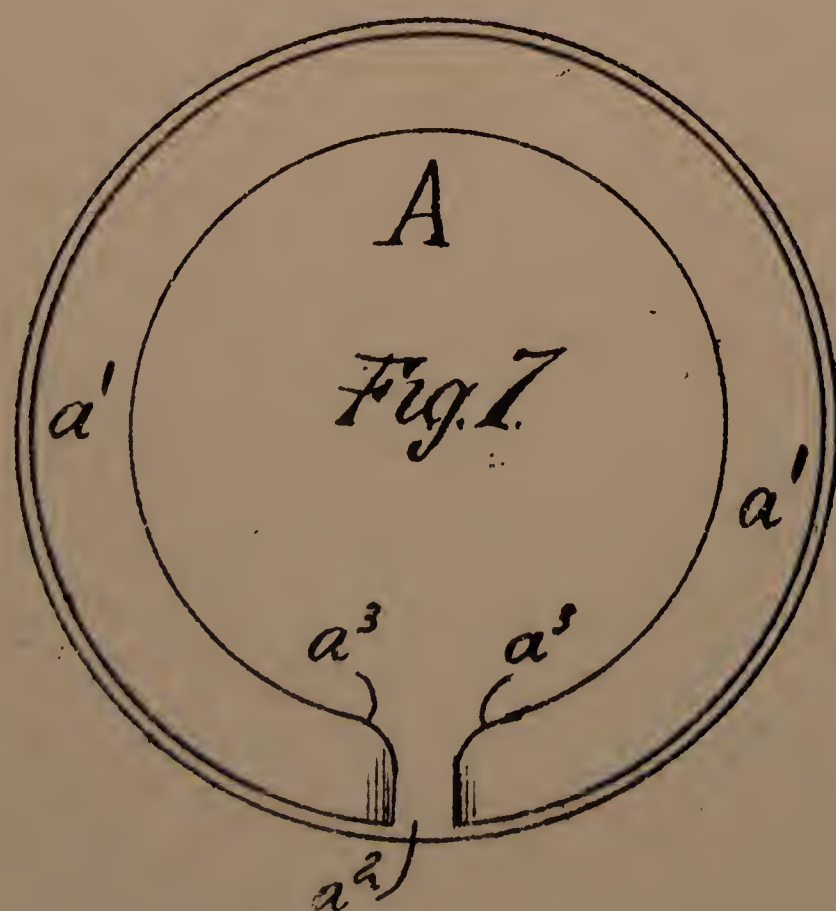
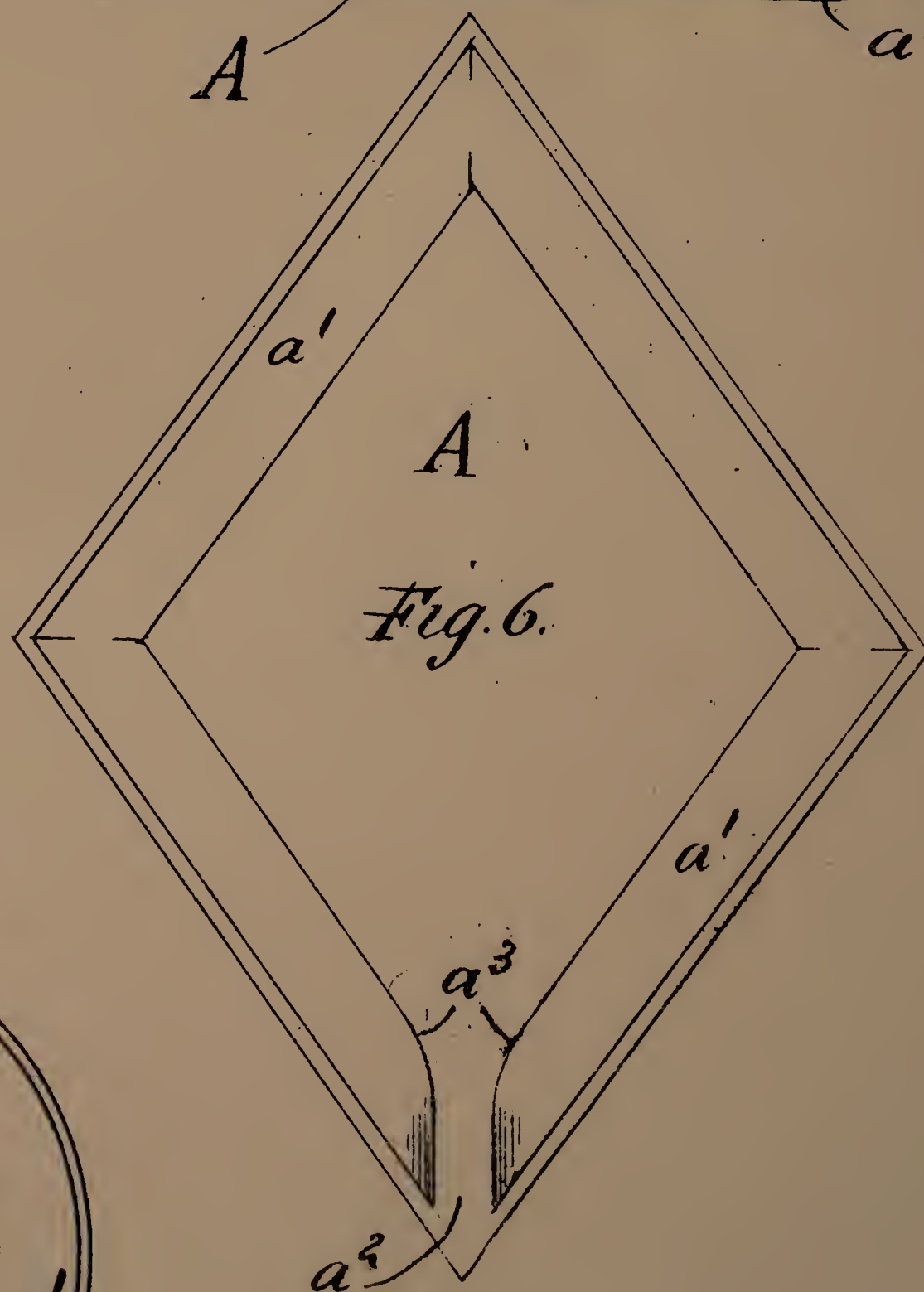
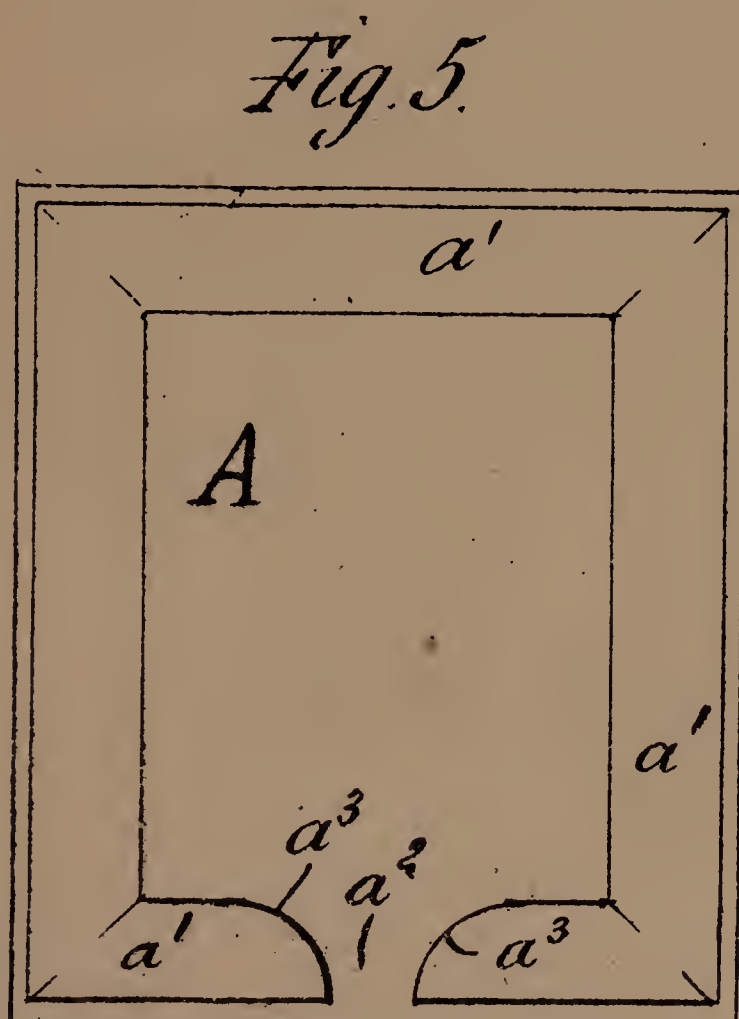
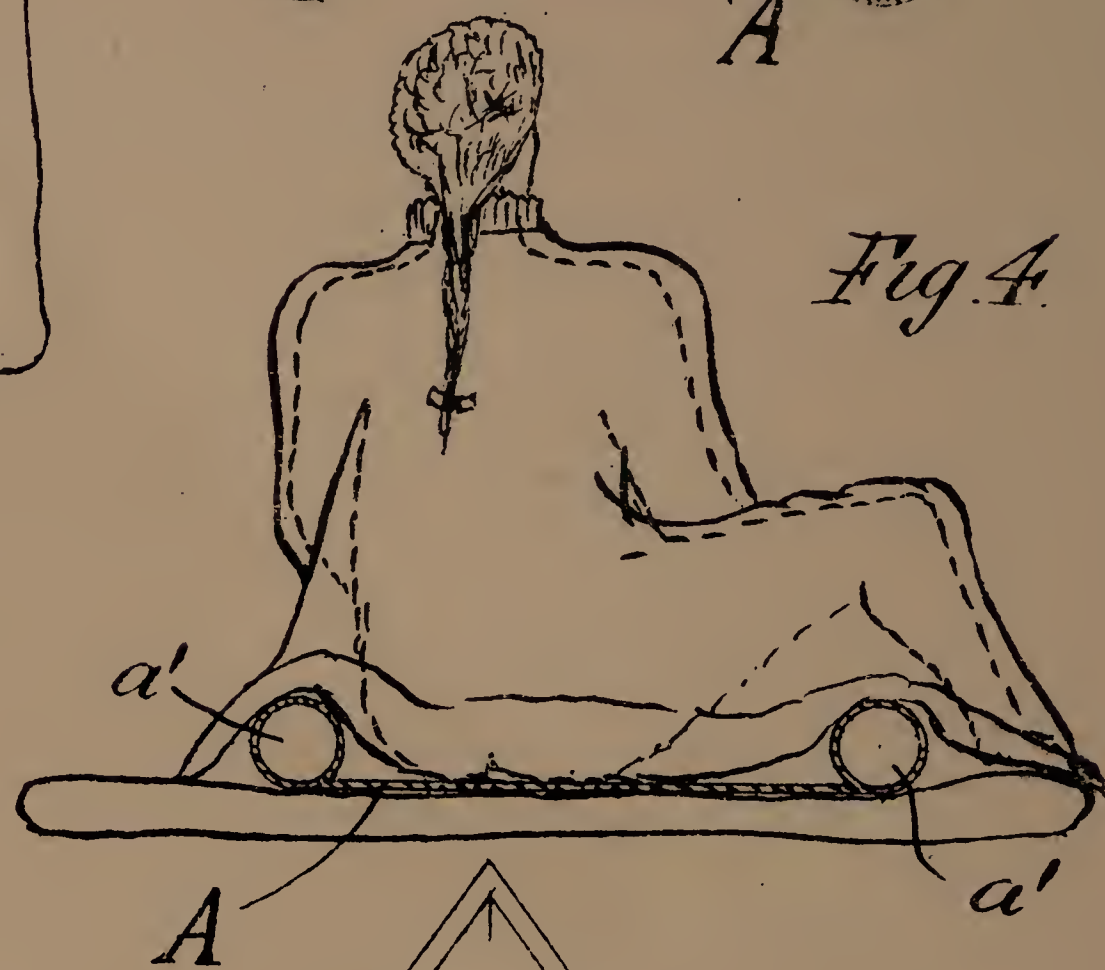
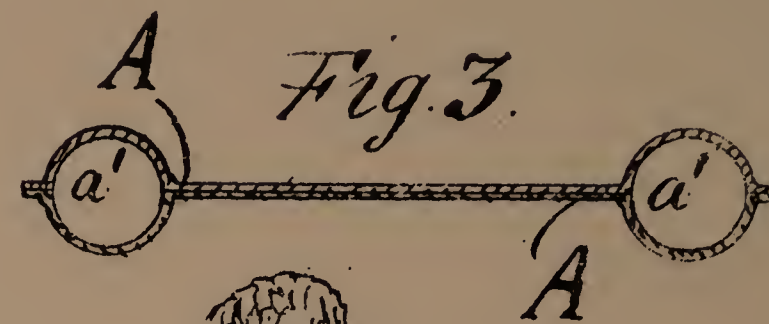
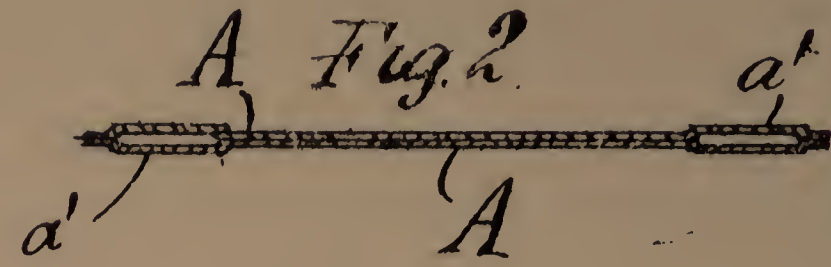
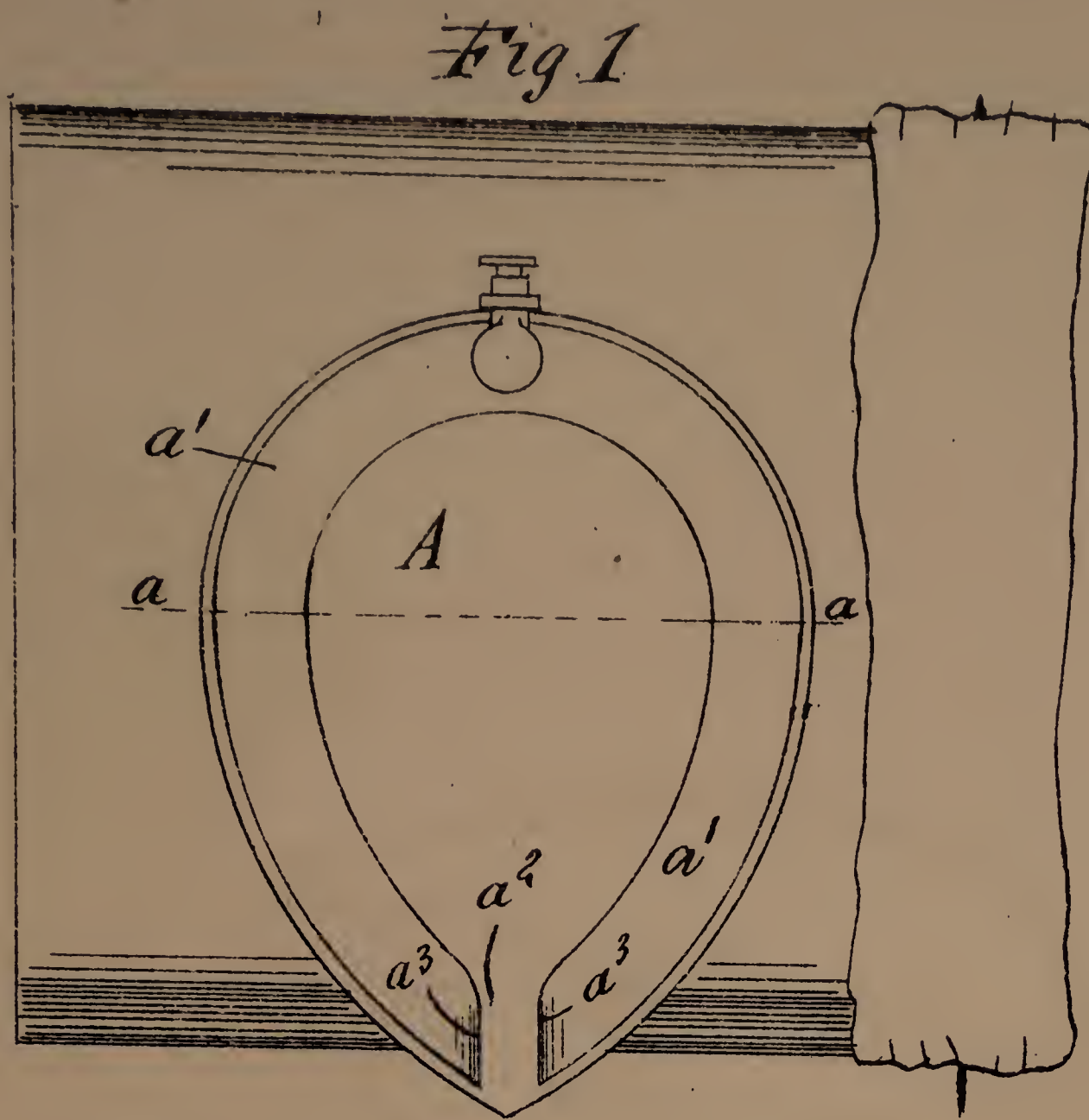
2. In a waterproof bed protector the combination of partially surrounding a sheet of indiarubber or other waterproof material with a pneumatically inflated cushion or rim and leaving a clear passage for the flow of liquid from the inner 50 part of said rim substantially as described and illustrated.

Dated this 27th day of May 1895.

H. F. BOUGHTON,
Registered Patent Agent, Barnsley.



BIRMINGHAM'S COMPLETE SPECIFICATION.



[This Drawing is a reproduction of the Original on a reduced scale.]

